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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
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| 09/852,266   | 05/10/2001  | Shunpei Yamazaki     | 12732-035001 / US4908        | 5445             |
| 26171 7590 03/08/2007<br>FISH & RICHARDSON P.C.<br>P.O. BOX 1022<br>MINNEAPOLIS, MN 55440-1022 |             |                      | EXAMINER<br>EHICHOYA, FRED I |                  |
|  |             |                      | ART UNIT                     | PAPER NUMBER     |
|  |             |                      | 2162                         |                  |

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 03/08/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

09/852,266

Applicant(s)

YAMAZAKI ET AL.

Examiner

Fred I. Ehichioya

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2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Disposition of Claims: Claims pending in the application are 11- 17, 29, 30, 32, 33, 35, 36, 38, 39, 41, 42, 44, 45, 47, 48, 50, 51, 53, 54, 66, 67 and 70 - 81 .

Continuation of Disposition of Claims: Claims rejected are 11- 17, 29, 30, 32, 33, 35, 36, 38, 39, 41, 42, 44, 45, 47, 48, 50, 51, 53, 54, 66, 67 and 70 - 81 .

### DETAILED ACTION

1. This Office Action is responsive to communication filed December 11, 2006.
2. Claims 11- 17, 29, 30, 32, 33, 35, 36, 38, 39, 41, 42, 44, 45, 47, 48, 50, 51, 53, 54, 66, 67 and 70 – 81 are pending with claims 11, 17 and 70 - 72 being independent. Claims 11, 17, 66 and 67 have been amended; Claims 1 - 10, 18 - 28, 31, 37, 40, 43, 46, 49, 52, 55, 56, 58 - 65, 68 and 69 have been canceled. Claims 34 and 57 were previously canceled; and new claims 70 - 81 are added.

### *Response to Arguments*

3. Applicant argues:
  - (a) ***Neither Uchida, Fakuzumi, nor any proper combination of the two describes or suggests sending a password as a data to a mating party (or a manager) after authentication end signal is sent to the mating party (or manager), transmitting a re-write approval signal having information representing approval of re-write of reference living body information from mating party (or the manager) when the password is authenticated as correct on the mating parting (or manager), and rewriting the reference living body information after the user receives the re-write approval signal from the mating party (or manager) (page 12, paragraph 2).***

Examiner respectfully disagrees with the applicants. Uchida discloses "sending a password as a data to a mating party (or a manager) after authentication end signal is

sent to the mating party (or manager) as shown on Page 27, line 21 – page 28, line 12), transmitting a re-write approval signal having information representing approval (page 22, lines 23 – 24) of re-write of reference living body information (page 20, lines 13 – 17: “fingerprint” is interpreted as “living body”) from mating party (or the manager) (page 4, line 27 – page 5, line 2: “authentication terminal” is interpreted “mating party”) when the password is authenticated as correct on the mating party (or manager), and rewriting the reference living body information (page 20, lines 13 – 17: “fingerprint” is interpreted as “living body”) after the user receives the re-write approval signal (page 22, lines 23 – 24) from the mating party (or manager) (page 4, line 27 – page 5, line 2: “authentication terminal” is interpreted “mating party”) as described on column 6, lines 43 – 46: examiner interprets “signal identification section 8” as “authentication end signal”.

***(b) Li does not remedy the failure of Uchida and Fukuzumi to describe or suggest the subject matter of independent claims (page 12, paragraph 3).***

Examiner respectfully disagrees with the applicant. Regarding claims 38, 39, 41, 42 and 47, Uchida and Fukuzumi disclose the claimed subject matter as discussed in the independent claims respectively. Li further teaches the storing means is a flash memory (column 12, lines 20 – 27). The motivation is that Li’s teaching of “flash memory” would have allowed Uchida and Fukuzumi’s system to involve the use of fingerprint matching to authenticate a call or other communication over a wireless communication network as suggested by Li at column 3, lines 10 - 12. The flash memory is also a backup mean which enable easy transportation of data from one system to another.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11- 17, 29, 30, 32, 33, 35, 36, 38, 39, 41, 42, 44, 45, 47, 48, 50, 51, 53, 54, 66, 67 and 70 – 81 are rejected under 35 U.S.C. 101 because:

Regarding claims 11, 17, and 70 - 72, these claims are directed to non-statutory subject matter. Applicant claims approval signal/end signal, however on Page 26, lines 20 - 23 of the specification specifies "the term signal processing hereby means more concretely a processing for converting the intensity of sound for each frequency to numerical values by using a band-pass filter". This makes the above-mentioned claims non-statutory because carrier waves cannot be patented since they are clearly not a series of steps or acts to constitute a process, not a mechanical device or combination of mechanical devices to constitute a machine, not a tangible physical article or object which is some form of matter to be a product and constitute a manufacture, and not a composition of two ore more substances to constitute a composition of matter.

Merely claiming nonfunctional descriptive material, i.e., abstract ideas, stored in a computer-readable medium, in a computer, on an electromagnetic carrier signal does not make it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ.

Regarding claims 10- 16, 29, 30, 32, 33, 35, 36, 38, 39, 41, 42, 44, 45, 47, 48, 50, 51, 53, 54, 66, 67 and 73 – 81, and in view of MPEP 2106 (II) (A), are not statutory because they recite computing instructions without producing any concrete and useful result and/or being limited to a practical application within the technological arts. The

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claims are merely descriptive and lack the necessary physical articles or objects to constitute a machine or a manufacture within the meaning of 35 USC 101. The claims do not accomplish a tangible result as forth in MPEP 2106 (II) (A); therefore non-statutory.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claims 11 – 17, 29, 30, 32, 33, 35, 36, 44, 45, 5, 51, 53, 54, 66, 67, and 70 - 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida in view of USPN 6,144,757 issued to Shinichi Fukuzumi et al (hereinafter "Fukuzumi").

Regarding claims 11 and 17, Uchida teaches a communication system for distinguishing a user, said system comprising:

a storing means for storing reference living body information (see page 20, lines 13 – 17; Uchida discloses "fingerprint" as "living body");

a reading means for reading collating living body information of the user (page 21, lines 17 – 19; Examiner interprets "unit 12" as "reading means");

a sending means for sending (page 11, lines 8 – 10) the authentication end signal to a mating party (Fukuzumi: column 6, lines 43 - 46);

wherein a password is sent as data to the mating party/manager after the authentication end signal to a mating party (Fukuzumi: column 6, lines 43 - 46) is sent to the mating party/manager (page 28, lines 1 - 12), and the reference living body information is rewritten when the password is authenticated as correct on the mating party (page 36, lines 6 - 9).

Wherein a re-write approval signal information representing approval of re-write of the reference living body (page 20, lines 13 – 17) information is transmitted from the mating party (page 5, lines 8 – 11) when the password is authenticated as correct on the mating party (page 4, line 27 – page 5, line 2), and



Wherein the reference living body information (page 20, lines 13 – 17) is written after the user receives the re-write approval signal from the mating party (page 22, lines 23 – 24)

Uchida does not explicitly collation and a collating means for collating the collation living body information with the reference living body information.

Fukuzumi discloses collation (column 6, lines 6 - 8) and a collating means for collating the collation living body information with the reference living body information (column 7, lines 34 – 38).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Fukuzumi's teaching of "collation" would have allowed Uchida's system to provide an organism identification method that can securely identify whether or not a fingerprint image input object relates to a living body.

Regarding claim 12, Uchida teaches a wherein the reference living body information comprises n reference living body information, the collation living body information of the user comprises n collation living body information of the user, the collating means collates the n collation living body information with the n reference living body information (page 8, lines 15 – 24), and the sending means for sends (page 11, lines 8 – 10) the authentication end signal to a mating party (Fukuzumi: column 6, lines 43 - 46) to the mating party when all of collation results prove coincident (page 23, lines 5 - 10).

Regarding claim 13, Uchida teaches wherein the reference living body information comprises n reference living body information, the collation living body information of the user comprises m collation living body information of the user, the collating means collates the m collation living body information with the n reference living body information, and the sending means sends the authentication end signal to a mating party (Fukuzumi: column 6, lines 43 - 46) to the mating party when at least one of the n reference living body information coincides with at least one of the m collation living body information (see page 21, lines 14 - 27).

Regarding claim 14, Uchida teaches wherein the reference living body information comprises a plurality of kinds of reference living body information, the collation living body information of the user comprises a plurality of kinds of collation living body information of the user, the collating means collates the plurality of collation living body (Fukuzumi: column 7, lines 34 - 38) information with the plurality of reference living body information (Uchida discloses "biometrics (features particular to the individual), with the other biometrics such as palm pattern, face, iris, retina pattern, palm shape, handwriting, voice print, or the like input" as "plurality of reference living body information" (page 30, lines 22 - 25), and the sending means sends (page 11, lines 8 - 10) the authentication end signal (Fukuzumi: column 6, lines 43 - 46: examiner interprets "signal identification section 8" as "authentication end signal") to the mating party when the plurality of kinds of collation living body information wholly coincide with the plurality of kinds of reference living body information (page 23, lines 5 - 10:

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Examiner interprets "input fingerprint is in accord with the fingerprint feature stored" as "when all of collation results prove coincident")

Regarding claim 15, Uchida teaches wherein the reference living body information comprises n reference living body information of a plurality of kinds, the collation living body information comprises in collation living body information of a plurality of kinds of a user, the collating means collates the m collation living body information with the n reference living body information (Fukuzumi: column 7, lines 34 – 38), and the sending means sends the authentication end signal to a mating party (Fukuzumi: column 6, lines 43 - 46) to the mating party when at least one of each kind of collation living body information among the plurality of kinds of collation living body information coincides with at least one of each kind of reference living body information among the n reference living body information (see page 23, lines 5 – 23).

Regarding claim 16, Uchida teaches wherein the reference living body information comprises n reference living body information of a plurality of kinds, the collation living body information comprises m collation living body information of a plurality of kinds of a user, the collating means collates the in collation (Fukuzumi: column 7, lines 34 – 38) living body information with the n reference living body information, and the sending means sends the authentication end signal to a mating party (Fukuzumi: column 6, lines 43 - 46) to the mating party when all of the plurality of

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kinds of collation living body information coincide with all of the n reference living body information (see page 21, lines 14 – 27).

Regarding claim 29 and 30, Uchida teaches wherein the reference living body information comprises at least one selected from the group consisting of a fingerprint, a palm print and a voiceprint (see page 35, lines 7 – 16).

Regarding claims 32 and 33, Uchida teaches wherein the collation living body information comprises at least one selected from the group consisting of a fingerprint, a palm print and a voiceprint (see page 35, lines 7 – 16).

Regarding claim 35, 36, 53 and 54, Uchida teaches wherein the palm print is a palm print of the whole palm or a palm print of a part of the palm (see page 35, lines 7 – 16).

Regarding claims 44 and 45, Uchida teaches a portable information terminal comprising the storing means, the reading means, the collating means, the controlling means, and the sending means is used (see page 35, lines 17 – 22).

Regarding claims 50 and 51, Uchida teaches a personal computer comprising the storing means, the reading means, the collating means, the controlling means, and the sending means is used (see pages 1 - 3).

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Regarding claims 66 and 67, Uchida discloses wherein the reading means is a display part having a built-in-sensor (page 18, lines 22 – 270

Regarding claims 70 and 71, Uchida teaches a communication system for distinguishing a user, said system comprising:

storing reference living body information of the user (see page 20, lines 13 – 17; Uchida discloses “fingerprint” as “living body”);

reading collating living body information of the user (page 21, lines 17 – 19; Examiner interprets “unit 12” as “reading means”);

outputting an authentication end signal from controlling means when a collation result proves coincident (page 36, lines 18 – 20);

sending (page 11, lines 8 – 10) the authentication end signal to a mating party (Fukuzumi: column 6, lines 43 - 46) so that communication is started (page 4, lines 18 – 20)

sending password as data to the mating party/manager after communication is started (page 4, lines 18 – 20);

and the reference living body information is rewritten when the password is authenticated as correct on the mating party (page 36, lines 6 - 9).

transmitting a re-write approval signal having information representing approval of re-write of the reference living body (page 20, lines 13 – 17) from the mating party (page 5, lines 8 – 11) to the user when the password is authenticated as correct on the mating party (page 4, line 27 – page 5, line 2), and

reading a living body information of the user (page 20, lines 13 – 17) so that the reference living body information is rewritten after the receiving the re-write approval signal from the mating party (page 22, lines 23 – 24)

Uchida does not explicitly collation and a collating the collation living body information with the reference living body information.

Fukuzumi discloses collation (column 6, lines 6 - 8) and a collating means for collating the collation living body information with the reference living body information (column 7, lines 34 – 38).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Fukuzumi's teaching of "collation" would have allowed Uchida's system to provide an organism identification method that can securely identify whether or not a fingerprint image input object relates to a living body.

Regarding claim 72, Uchida teaches a communication system for distinguishing a user, said system comprising:

storing reference living body information of the user (see page 20, lines 13 – 17; Uchida discloses "fingerprint" as "living body");

reading collating living body information of the user (page 21, lines 17 – 19);

outputting an authentication end signal from controlling means (page 36, lines 18 – 20); and

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sending (page 11, lines 8 – 10) the authentication end signal to a manager  
(Fukuzumi: column 6, lines 43 - 46),

wherein a communication between the user and a mating party is started directly through the manager after the mating party receives the authentication end signal (page 4, lines 19 - 20)

Uchida does not explicitly collation and a collating the collation living body information with the reference living body information.

Fukuzumi discloses collation (column 6, lines 6 - 8) and a collating means for collating the collation living body information with the reference living body information (column 7, lines 34 – 38).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Fukuzumi's teaching of "collation" would have allowed Uchida's system to provide an organism identification method that can securely identify whether or not a fingerprint image input object relates to a living body.

Regarding claim 73, Uchida teaches wherein a communication between the user and a mating party is started directly through the manager after the mating party receives the authentication end signal (page 4, lines 19 - 20).

Regarding claims 74, Uchida discloses wherein the manager sends the authentication end signal to the mating party after the manager receives the authentication end signal (page 4, lines 27 – 52).

Regarding claim 75, Uchida discloses wherein the manager sends the authentication end signal to the mating party after the manager receives the authentication end signal (page 4, lines 27 – 52), and

wherein a communication between the user and a mating party is directly after the mating party receives the authentication end signal (page 4, lines 19 - 20).

Regarding claims 76, 77 and 78, Uchida discloses wherein a transaction is conducted between the user and the mating party (page 4, lines 18 – 20), and

Wherein an identification of the user is requested only when a condition set to the mating party is satisfied (page 34, line 25 – page 35, line 5).

Regarding claims 79, 80 and 81, Uchida teaches wherein the reference living body information comprises at least one selected from the group consisting of a fingerprint, a palm print and a voiceprint (see page 35, lines 7 – 16), and

wherein the collation living body information comprises at least one selected from the group consisting of a fingerprint, a palm print and a voiceprint (see page 35, lines 7 – 16).



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7. Claims 38, 39, 41, 42, 47 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida in view of Fukuzumi as discussed in independent claims 1, 7, 11, 17 and further in view of USPN 6,219,793 issued to Yang Li et al (hereinafter "Li").

Regarding claims 38 and 39, Uchida and Fukuzumi disclose the claimed subject matter as discussed in 1, 7, 11 and 17 respectively. Uchida or Nakamura does not explicitly teach a flash memory.

Li teaches the storing means is a flash memory (column 12, lines 20 – 27).

It would have been obvious to one of ordinary skill in the data processing art at the time of the present invention to combine teaching of the cited references because Li's teaching of "storing means is a flash memory" would have allowed Uchida and Fukuzumi's system to involve the use of fingerprint matching to authenticate a call or other communication over a wireless communication network as suggested by Li at column 3, lines 10 - 12.

Regarding claims 41 and 42, Li teaches the reading means is a photodiode or a charge coupled device (see column 4, lines 50 – 65).

Regarding claims 47 and 48, Li teaches a cellular telephone comprising storing means, the reading means, collating means, the controlling means, and the sending means is used (see column 4, lines 33 – 49).

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 571-272-4034. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Fred I. Ehichioya  
Patent Examiner  
Art Unit 2162



March 5, 2007

  
JOHN BREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100